



Atty. Dkt. No. 016907/1249

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Masatsuga HIRAYAMA  
Title: IMAGE PROCESSING APPARATUS AND  
IMAGE FORMING APPARATUS  
Appl. No.: 09/922,733  
Filing Date: August 7, 2001  
Examiner: Not yet assigned  
Art Unit: Not yet assigned

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, Applicants respectfully request that the above-identified application be amended as follows:

**IN THE DRAWINGS:**

Applicant proposes to add new FIG. 11 attached to this Preliminary Amendment.

**IN THE SPECIFICATION:**

On page 7, before "DETAILED DESCRIPTION OF THE INVENTION" insert the following new paragraph.

FIG. 11 is a graph showing the frequency characteristics of a basic filter and differential filter.

In accordance with 37 CFR §1.121, please substitute for the following paragraphs the following rewritten version of the same paragraphs, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

The paragraph starting on page 13, line 24:

2. Computation of Filter Coefficient Value FLT [i]

$$\text{FLT [i]} = \text{FB [i]} + \text{gain} \times (\text{FD [i]} - \text{FB [i]}) \cdots (2)$$

i: Serial number of the filter coefficient

FB [i]: Basic filter coefficient

FD [i]: Differential filter coefficient

The paragraph starting on page 14, line 9:

As shown in FIG. 11, a design is made such that the frequency characteristic curves of a group of the basic filter and differential filter are substantially equal to each other, and only the intensities are different (the peak frequencies are the same, and the degrees of enhancement are different). Doing this makes it possible to obtain a filter coefficient with its changed intensity without changing the shape of frequency response through computation.

**REMARKS**

The specification has been amended editorially.

Support for new FIG. 11 can be found in the specification at page 14, lines 9-17.  
No new matter has been added.

Applicant respectfully requests consideration of the present application in view  
of the foregoing amendments.

The Examiner is invited to contact the undersigned by telephone if it is felt that a  
telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date

11/26/01

By

Johnny A. Kumar

FOLEY & LARDNER  
Washington Harbour  
3000 K Street, N.W., Suite 500  
Washington, D.C. 20007-5109  
Telephone: (202) 672-5489  
Facsimile: (202) 672-5399

Johnny A. Kumar  
Attorney for Applicant  
Registration No. 34,649

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification:**

The paragraph starting on page 13, line 24:

**2. Computation of Filter Coefficient Value FLT [i]**

$$\text{FLT [i]} = \text{FB [i]} + \text{gain} \times [\text{FD [i]}] \text{ (FD [i] - FB [i])} \cdots (2)$$

i: Serial number of the filter coefficient

FB [i]: Basic filter coefficient

FD [i]: Differential filter coefficient

The paragraph starting on page 14, line 9:

As shown in FIG. [5], 11 a design is made such that the frequency characteristic curves of a group of the basic filter and differential filter are substantially equal to each other, and only the intensities are different (the peak frequencies are the same, and the degrees of enhancement are different). Doing this makes it possible to obtain a filter coefficient with its changed intensity without changing the shape of frequency response through computation.